# 5520 Series

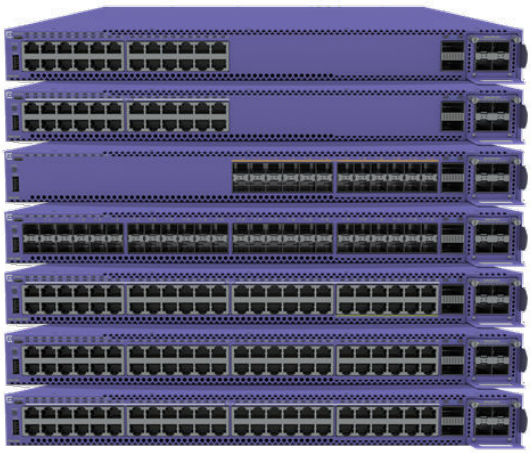
## Highlights

- Manageable by Extreme Platform ONE™*, ExtremeCloud™ IQ or ExtremeCloud IQ Site Engine
- Fabric-enabled operations with Extreme Fabric for simplified and secure network provisioning and automation
- Choice of operating system (OS) with dual-persona Universal Hardware
- Reduced mean time to resolution with AI
- ExtremeCloud Universal ZTNA policy enforcement
- Automated and streamlined switch provisioning and day-to-day operations with cloud-based instant actions
- Fixed 24 and 48-port switches with gigabit and multi-gigabit support
- Front to back cooling and AC power supply input on all models
- Back to front cooling and DC power supply input option on specific models
- AC and DC Power Supply Unit (PSU) capable SKUs

## Key Hardware Features

- Choice of 10Gb and 25Gb modular uplink ports
- 30W, 60W and 90W PoE support for powering connected devices
- 200Gb per unit stacking of up to eight switches
- Hot-swappable, redundant power supplies and fans
- MACsec on access and modular uplink ports for secure link encryption
- Extended Edge Switching controlling bridge in support of V300/V400 edge devices
- Non-blocking, wire-speed design

*** Extreme Platform ONE™ General Availability (GA) in H2 2025**



## Universal Edge/Aggregation Switches

The 5520 Series is a family of high-performance, feature-rich edge and aggregation switches designed for the next-generation digital enterprise. Available in 24 and 48-port 1 Gigabit models, 1/2.5/5 Gigabit multi-rate models, as well as, a 24-port 10 Gigabit model, the 5520 Series provides end-to-end secure network segmentation and advanced policy capabilities that can be deployed across a range of edge, aggregation, and wiring closet environments. As a universal hardware solution, the 5520 offers a user-selectable choice of Extreme's flagship switch operating systems.

The 5520 supports 10Gb and 25Gb modular uplinks for flexible linkage to other switches or devices over a range of media. Extended Edge Switching controlling bridge is also available in support of V300/V400 edge devices, and select models offer a choice between Front to Back or Back to Front cooling. The 5520 Series offers 30W, 60W, and 90W PoE, making it an ideal wired backend for wireless APs or in support of next-gen powered Ethernet devices, such as digital signage, pan-tilt-zoom cameras, smart lighting, or point-of-sale terminals.

## Network Management Flexibility

The 5520 Universal Switch series are managed by Extreme Platform ONE or ExtremeCloud IQ from the cloud or on-premises. Alternatively, 5520 on-box management can be done manually via a web-based GUI or generic command-line interface (CLI).

## Extreme Platform ONE™

Extreme Platform ONE™ is an enterprise connectivity platform that integrates networking and security with AI into one powerful and radically simplified experience and licensing model. It supports NetOps, SecOps, and business teams with built in automation and enables organizations to regain control, unlock innovation, and boost productivity through:

- One integrated experience that is easy to use.
- Automation through built-in AI that boosts productivity, reducing cycle time for many tasks from hours to minutes.
- Simplified licensing that makes the solution as easy to buy as it is to use.
- AI-assisted workflows for configuration, deployment, and management.
- Extreme Fabric and third-party switch visualization and management in cloud.
- Inventory management simplifies budgeting, planning and compliance.

## Power over Ethernet (PoE)

All 5520 models support 30W, 60W, and 90W PoE that conforms with IEEE 802.3bt. This enables the 5520 to address the needs of powered edge devices, while eliminating the need for additional electrical cabling and circuits. In addition, 5520 PoE models support perpetual and fast PoE for even more efficient and reliable powered edge device operation.

## VIM Options for Flexible Uplinks

The 5520 supports Versatile Interface Modules (VIMs) providing flexible uplink capabilities with a single VIM slot. VIM options include four-port 10Gb or 25Gb modules that include LRM and 256-bit MACsec support., real-time audio/ video transmission over Ethernet. meeting the quality of service required for today's high-definition, time- sensitive multimedia streams.

## High-Performance Stacking

The 5520 Series supports high-speed 200Gb* stacking when running Switch Engine via its two built-in QSFP28 stacking ports. Up to eight systems can be stacked using qualified QSFP+ direct attach cables and optical transceivers.

*200Gb stacking available with Switch Engine 31.6

## Audio Video Bridging

The 5520 series supports IEEE 802.1 Audio Video Bridging (AVB) when running Switch Engine OS. This allows 5520 models to deliver reliable, real-time audio/video transmission over Ethernet, meeting the quality of service required for today's high-definition, time-sensitive multimedia streams.

## Universal Hardware

The 5520 Series comes with a dual-persona capability, allowing you to choose your Operating System (OS). Either the Switch Engine (EXOS) or Fabric Engine (VOSS) OS can be selected at switch start-up or changed at a later stage. When selected, the switch assumes the features and capabilities of that OS. 5520 OS selection can also be automated with Extreme Platform ONE or ExtremeCloud IQ so that the desired OS can be automatically loaded at switch start-up, facilitating remote OS enablement.

## Security

Extreme Universal hardware enables the extension and enforcement of Fabric and Universal ZTNA policies. Wherever users connect through the network, their access is secure and segmented. ExtremeCloud Universal ZTNA, which combines zero-trust network and application access in one solution, automatically configures devices to enforce security policy consistently. When used in concert with Extreme Fabric, Universal ZTNA becomes part of the fabric services that automate segmentation and allow the network to flex for efficiency and resiliency while keeping security policy consistent end-to-end.

## Network Fabric

The 5520 series switches support Extreme's network fabric natively for network virtualization, automation, and network security. Extreme Fabric is the industry's most simple, resilient, and secure end-to-end, enterprise network fabric solution. Fabric automates discovery and onboarding of network and user devices. Its sub-second convergence reduces unplanned downtime and maintenance windows. Automated micro-segmentation and stealth topology enhance and automate network security across campus, data center, and branch. Fabric is included free with the purchase of the 5520, no additional licenses or controllers are required.

## Instant Onboarding

5520 Series onboarding to the cloud is a hands-off operation using zero touch provisioning. Simply unpack the 5520 Series switch, connect it to the network, and it automatically connects to the cloud, ready to be provisioned. New switches can be configured, one-by-one, with a few clicks. Instant port, instant secure port, and instant stack all further reduce time spent on deployment.

## Instant Port*

Instant Port automates adds, moves or changes across 5520 Series switch ports, eliminating the need for manual port configuration. The 5520 Series automatically detects the connected device and applies the correct port parameters. The result is significant time savings when adding or moving devices across the 5520 Series wired network. A simple cloud interface allows instant Port definitions of customer designated device types which can then be applied across a single switch, a stack or even all 5520 Series switches in the network.

## Instant Secure Port*

Instant Secure Port leverages ExtremeCloud Universal ZTNA for authentication and zero-trust policy enforcement across the 5520 Series switch ports, while providing the same add, move, and change automation features of Instant Port. It simplifies 5520 Series security by using Universal ZTNA's cloud-based security capabilities, including RADIUS authentication, unified visibility and reporting, as well as policy enforced locally on 5520 Series ports. In doing so, it delivers a consistent and frictionless security experience for any user or device connecting through the 5520 Series switch. (Note: ExtremeCloud Universal ZTNA requires a separate license.)

## Instant Stack*

Instant Stack simplifies cloud-based stack provisioning, enabling the entire switch stack to be set up through a single push-button operation. Real-world stack information, including each switch model and their stack order is captured and replicated in the cloud. Once set up, the entire stack is then ready to be cloud-provisioned.

*Supported via Switch Engine only

## External Interfaces

| Switch Model | Interfaces |
|---|---|
| 5520-24T | • 24 x 10/100/1000BASE-T ports<br>  ◦ Full / Half-Duplex (autosensing)<br>  ◦ MACsec-capable<br>• 2 x Stacking/QSFP28 ports* (unpopulated)<br>• 1 x Serial console port (RJ-45)<br>• 1 x 10/100/1000BASE-T out-of-band management port<br>• 2 x USB A ports for management or external USB flash<br>• 1 x USB Micro-B console port<br>• 1 x VIM slot |
| 5520-24W | • 24 x 10/100/1000BASE-T 802.3bt (90W) ports<br>  ◦ Full / Half-Duplex (autosensing)<br>  ◦ MACsec-capable<br>• 2 x Stacking/QSFP28 ports* (unpopulated)<br>• 1 x Serial console port (RJ-45)<br>• 1 x 10/100/1000BASE-T out-of-band management port<br>• 2 x USB A ports for management or external USB flash<br>• 1 x USB Micro-B console port<br>• 1 x VIM slot |
| 5520-48T | • 48 x 10/100/1000BASE-T ports<br>  ◦ Full / Half-Duplex (autosensing)<br>  ◦ MACsec-capable<br>• 2 x Stacking/QSFP28 ports* (unpopulated)<br>• 1 x Serial console port (RJ-45)<br>• 1 x 10/100/1000BASE-T out-of-band management port<br>• 2 x USB A ports for management or external USB flash<br>• 1 x USB Micro-B console port<br>• 1 x VIM slot |
| 5520-48W | • 48 x 10/100/1000BASE-T 802.3bt (90W) ports<br>  ◦ Full / Half-Duplex (autosensing)<br>  ◦ MACsec-capable<br>• 2 x Stacking/QSFP28 ports* (unpopulated)<br>• 1 x Serial console port (RJ-45)<br>• 1 x 10/100/1000BASE-T out-of-band management port<br>• 2 x USB A ports for management or external USB flash<br>• 1 x USB Micro-B console port<br>• 1 x VIM slot |
| 5520-12MW-36W | • 12 x 100M/1/2.5/5GBASE-T 802.3bt (90W) PoE ports<br>• 36 x 10/100/1000BASE-T 802.3bt (90W) PoE ports<br>  ◦ Full-Duplex<br>  ◦ MACsec-capable<br>• 2 x Stacking/QSFP28 ports* (unpopulated)<br>• 1 x Serial console port (RJ-45)<br>• 1 x 10/100/1000BASE-T out-of-band management port<br>• 2 x USB A ports for management or external USB flash<br>• 1 x USB Micro-B console port<br>• 1 x VIM slot |

| Switch Model | Interfaces |
|---|---|
| 5520-48SE | • 48 x 100/1000BASE-X (SFP) ports (unpopulated)<br>  ◦ MACsec-capable<br>• 2 x Stacking/QSFP28 ports* (unpopulated)<br>• 1 x Serial console port (RJ-45)<br>• 1 x 10/100/1000BASE-T out-of-band management port<br>• 2 x USB A ports for management or external USB flash<br>• 1 x USB Micro-B console port<br>• 1 x VIM slot |
| 5520-24X | • 24 x 100M/1G/10GBASE-X (SFP+) ports** (unpopulated)<br>• 2 x Stacking/QSFP28 ports* (unpopulated)<br>• 1 x Serial console port (RJ-45)<br>• 1 x 10/100/1000BASE-T out-of-band management port<br>• 2 x USB A ports for management or external USB flash<br>• 1 x USB Micro-B console port<br>• 1 x VIM slot |
| 5520-24T-ACDC | • 24 x 10/100/1000BASE-T FDX/HDX MACsec capable ports<br>• 2 stacking/QSFP28 ports<br>• 1 unpopulated VIM slot<br>• 3 unpopulated modular fan slots<br>• 2 unpopulated modular PSU slots<br>• AC or DC PSU capable |
| 5520-48T-ACDC | • 48 x 10/100/1000BASE-T FDX/HDX MACsec capable ports<br>• 2 stacking/QSFP28 ports<br>• 1 unpopulated VIM slot<br>• 3 unpopulated modular fan slots<br>• 2 unpopulated modular PSU slots<br>• AC or DC PSU capable |
| 5520-24X-ACDC | • 24 x 100M/1Gb/10Gb SFP+ ports** (unpopulated)<br>• 2 stacking/QSFP28 ports (unpopulated)<br>• 1 unpopulated VIM slot<br>• 3 unpopulated modular fan slots<br>• 2 unpopulated modular PSU slots<br>• AC or DC PSU capable |
| 5520-48SE-ACDC | • 48 x 100/1000BASE-X SFP MACsec capable ports (unpopulated)<br>• 2 stacking/QSFP28 ports (unpopulated)<br>• 1 unpopulated VIM slot<br>• 3 unpopulated modular fan slots<br>• 2 unpopulated modular PSU slots<br>• AC or DC PSU capable |
| 5520-VIM-4X | • 4 x 1/10GBASE-X SFP+ ports (unpopulated) |
| 5520-VIM-4XE | • 4 x 1/10GBASE-X SFP+ ports (unpopulated)<br>  ◦ LRM-capable<br>  ◦ MACsec-capable |
| 5520-VIM-4YE | • 4 x 10/25GBASE-X SFP28 ports (unpopulated)<br>  ◦ MACsec-capable |

* Notes on use of the 2 x Stacking/QSFP28 ports

1. With Switch Engine, the 2 x QSFP28 ports can be used for stacking or as Ethernet uplink ports (when not stacking); stacking data rate is 40Gb or 50Gb per port.
2. With Fabric Engine, the 2 x QSFP28 ports can be used as Ethernet uplink ports if in non-Fabric mode or if no VIM is present as of the VOSS 8.4.2 release.
3. Ethernet uplink QSFP28 data rate options per port, with channelization: 4 x 10Gb SFP+, 4 x 25Gb SFP28, 1 x 40Gb QSFP+ (supported with Switch Engine and Fabric Engine); 2 x 50Gb (Switch Engine only)

** 100M on 5520-24x and 5520-24x-ACDC access ports supported with Switch Engine and with Fabric Engine. Refer to the Extreme Optics Compatibility Tool.

## Performance and Scale

| Switch Model | Max Active 10Mb/ 100Mb/ 1000Mb ports | Max Active 100Mb/1Gb/ 2.5Gb/5Gb ports | Max Active 100Mb/1Gb SFP ports | Max Active 1Gb/10Gb SFP+ ports* | Max Active 25Gb SFP28 ports* | Max Active 40Gb QSFP+ ports** | Max Active 50Gb ports** | Max Active 40Gb/ 50Gb Stacking ports*** | Aggregated Switch Bandwidth | Frame Forwarding Rate |
|---|---|---|---|---|---|---|---|---|---|---|
| 5520-24T | 24 | 0 | 0 | 12 | 12 | 2 | 4 | 2 | 648 Gbps | 482.1 Mpps |
| 5520-24W | 24 | 0 | 0 | 12 | 12 | 2 | 4 | 2 | 648 Gbps | 482.1 Mpps |
| 5520-48T | 48 | 0 | 0 | 12 | 12 | 2 | 4 | 2 | 696 Gbps | 517.8 Mpps |
| 5520-48W | 48 | 0 | 0 | 12 | 12 | 2 | 4 | 2 | 696 Gbps | 517.8 Mpps |
| 5520-12MW-36W | 36 | 12 | 0 | 12 | 12 | 2 | 4 | 2 | 792 Gbps | 589.3 Mpps |
| 5520-48SE | 0 | 0 | 48 | 12 | 12 | 2 | 4 | 2 | 696 Gbps | 517.8 Mpps |
| 5520-24X | 0 | 0 | 24 | 36 | 12 | 2 | 4 | 2 | 1080 Gbps | 803.5 Mpps |
| 5520-24T-ACDC | 24 | 0 | 0 | 12 | 12 | 2 | 4 | 2 | 648 Gbps | 482.1 Mpps |
| 5520-48T-ACDC | 48 | 0 | 0 | 12 | 12 | 2 | 4 | 2 | 696 Gbps | 517.8 Mpps |
| 5520-24X-ACDC | 0 | 0 | 24 | 36 | 12 | 2 | 4 | 2 | 1080 Gbps | 803.5 Mpps |
| 5520-48SE-ACDC | 0 | 0 | 48 | 12 | 12 | 2 | 4 | 2 | 696 Gbps | 517.8 Mpps |

*Includes 8 ports (10Gb speed only, 1Gb not supported) available through channelization of the 2 x QSFP28 ports when not used for stacking with Switch Engine, or with VOSS 8.4.2 or later

**Available through channelization of the 2 x QSFP28 ports when these ports are not used for stacking in Switch Engine, or with VOSS 8.4.2 or later

***50Gb stacking with Switch Engine mode only 31.6 or later

## Software Scaling Values

### 5520 with Switch Engine

- MAC Table: 114,688/65,536
- IPv4 ARP Table: 60,000/41,000*
- IPv4 Route Table: 81,000/16,000*
- IP Multicast Entries (S,G,V): 43,000/24,000*
- IPv6 ND Table: 18,000
- IPv6 Route Table: 40,000/8,000*
- ACL (Ingress/Egress): 9,216/1,024
- QoS Egress Queues/Port: 8
- VLANs: 4,094
- Routed VLANs: 2,048

* First value is the maximum; second is the default. Scaling limits are configurable.See the Switch Engine Release Notes for additional details

### OnePolicy Scaling

- Policy Profiles: 63
- Unique permit/deny rules per switch: 8,120
- Authenticated policy users/switch: 9,216

### 5520 with Fabric Engine

- MAC Table: 40,960 (81,920 non-Fabric)
- IPv4 ARP/IP Host Table: 16,000/48,000
- IPv4 Route Table: 15,500
- IP Multicast Routes: 4,000
- IPv6 ND Table: 16,000
- IPv6 Route Table: 7,500
- IPv4 ACL (Ingress/Egress): 1,024/336
- QoS Egress Queues/Port: 8
- VLANs: 4,059
- Routed VLANs: 500

### Fabric Connect Scaling

- Fabric Adjacencies per switch: 128
- BEB Nodes per VSN: 500
- L2 VSN: 3500
- L3 VSN: 256

## Weights and Dimensions

### Switches

| Switch Model | Weight* | Physical Dimensions | |
|---|---|---|---|
| | | Chassis Only | With PSU |
| 5520-24T | 5.54 kg (12.21 lb.) | Height: 44 mm (1.73 in.)<br>Width: 441 mm (17.36 in.)<br>Depth: 442 mm (17.42 in.) | Height: 44 mm (1.73 in.)<br>Width: 441 mm (17.36 in.)<br>Depth: 449 mm (17.68 in.) |
| 5520-24W | 6.25 kg (13.78 lb.) | | |
| 5520-48T | 5.76 kg (12.70 lb.) | | |
| 5520-48W | 6.06 kg (13.36 lb.) | | |
| 5520-12MW-36W | 6.33 kg (13.96 lb.) | | |
| 5520-48SE | 5.70 kg (12.57 lb.) | | |
| 5520-24X | 6.25 kg (13.78 lb.) | | |
| 5520-24T-ACDC | 5.15 kg (11.35 lb.) | Height: 43 mm (1.71 in.)<br>Width: 431 mm (16.98 in.)<br>Depth: 442 mm (17.42 in.) | Not applicable |
| 5520-48T-ACDC | 5.95 kg (13.12 lb.) | | |
| 5520-24X-ACDC | 5.68 kg (12.52 lb.) | | |
| 5520-48SE-ACDC | 5.91 kg (13.03 lb.) | | |

* Switch weights include fans but no PSUs

### VIM Modules

| Model | Weight | Physical Dimensions |
|---|---|---|
| 5520-VIM-4X | 0.17 kg (0.37 lb.) | Height: 40.8 mm (1.61 in.)<br>Width: 48.8 mm (1.92 in.)<br>Depth: 146.3 mm (5.76 in.) |
| 5520-VIM-4XE | 0.20 kg (0.44 lb.) | |
| 5520-VIM-4YE | 0.21 kg (0.46 lb.) | |

### Power Supplies

| Model | Weight* | Physical Dimensions |
|---|---|---|
| XN-ACPWR-350W-FB (350W AC) | 1.08 kg (2.38 lb.) | Height: 82.5 mm (3.25 in.)<br>Width: 40 mm (1.57 in.)<br>Depth: 287 mm (11.30 in.) |
| XN-ACPWR-715W-FB (715W AC) | 1.16 kg (2.56 lb.) | |
| XN-ACPWR-1100W-FB (1100W AC) | 1.16 kg (2.56 lb.) | |
| XN-ACPWR-2000W-FB (2000W AC) | 1.16 kg (2.56 lb.) | Height: 75 mm (2.95 in.)<br>Width: 40 mm (1.57 in.)<br>Depth: 292 mm (11.50 in.) |
| XN-ACPWR-550W-FB | 0.81 kg (1.79 lb.) | Height: 40 mm (1.58 in.)<br>Width: 73.7 mm (2.90 in.)<br>Depth: 185.2 mm (7.29 in.) |
| XN-ACPWR-550W-BF | 0.81 kg (1.79 lb.) | |
| XN-DCPWR-550W-FB | 0.81 kg (1.79 lb.) | |
| XN-DCPWR-550W-BF | 0.81 kg (1.79 lb.) | |

## Power Supply Unit Specifications

| | XN-ACPWR-350W-FB | XN-ACPWR-350W-BF | XN-ACPWR-715W-FB | XN-ACPWR-1100W-FB | XN-ACPWR-2000W-FB* |
|---|---|---|---|---|---|
| Voltage Input Range (Nominal) | 100VAC-240VAC | 100VAC-240VAC | 100VAC-240VAC | 100VAC-240VAC | 100VAC-240VAC |
| Line Frequency Range | 50Hz to 60Hz | 50Hz to 60Hz | 50Hz to 60Hz | 50Hz to 60Hz | 50Hz to 60Hz |
| Power Supply Input Socket | IEC/EN 60320 C14 | IEC/EN 60320 C14 | IEC/EN 60320 C16 | IEC/EN 60320 C16 | IEC/EN 60320 C16 |
| Power Cord Input Plug | IEC/EN 60320 C13 | IEC/EN 60320 C13 | IEC/EN 60320 C15 | IEC/EN 60320 C15 | IEC/EN 60320 C15 |
| Operating Temperature | 0°C to 55°C<br>(32°F to 131°F)<br>Normal Operation | 0°C to 55°C<br>(32°F to 131°F)<br>Normal Operation | 0°C to 50°C<br>(32°F to 122°F)<br>Normal Operation | 0°C to 50°C<br>(32°F to 122°F)<br>Normal Operation | 0°C to 50°C<br>(32°F to 122°F)<br>Normal Operation |

* 200VAC-240VAC is required to achieve full 2000W output. If run at 100VAC-120VAC, output is limited to 1100W.

### Power Supply Unit Specifications (cont.)

| | XN-ACPWR-550W-FB | XN-ACPWR-550W-BF | XN-DCPWR-550W-FB | XN-DCPWR-550W-BF |
|---|---|---|---|---|
| Voltage Input Range (Nominal) | 100VAC-240VAC | 100VAC-240VAC | -48VDC (-36VDC to -72VDC) | -48VDC (-36VDC to -72VDC) |
| Line Frequency Range | 50Hz to 60Hz | 50Hz to 60Hz | N/A | N/A |
| Power Supply Input Socket | IEC 320 - C14 | IEC 320 - C14 | POSITRONIC PN# PLAH03M400A1/AA-E1A | POSITRONIC PN# PLAH03M400A1/AA-E1A |
| Power Cord Input Plug | IEC 320 - C13 | IEC 320 - C13 | POSITRONIC PN# PLAH03M400A1/AA-E1A | POSITRONIC PN# PLAH03M400A1/AA-E1A |
| Operating Temperature | 0°C to 50°C (32°F to 122°F) Normal Operation | 0°C to 50°C (32°F to 122°F) Normal Operation | 0°C to 50°C (32°F to 122°F) Normal Operation | 0°C to 50°C (32°F to 122°F) Normal Operation |

## PoE Power Budget

| Switch Model | 1 x 715W | 2x 715W | 1 x 1100W | 2 x 1100W | 1 x 2000W @ 100-120VAC | 1 x 2000W @ 200-240VAC | 2 x 2000W @ 100-120VAC | 2 x 2000W @ 200-240VAC |
|---|---|---|---|---|---|---|---|---|
| 5520-24W | 494W | 1079W | 879W | 1781W | 879W | 1779W | 1869W | 2160W |
| 5520-48W | 483W | 1068W | 868W | 1770W | 868W | 1768W | 1858W | 3568W |
| 5520-12MW-36W | 464W | 1049W | 849W | 1751W | 849W | 1749W | 1839W | 3549W |

Note: It is recommended that primary and secondary power supply units (PSUs) be of the same type to support optimal PoE operation.

## Minimum/Maximum Power Consumption and Heat Dissipation

| Switch Model | Minimum Power Consumption (W) | Minimum Heat Dissipation (BTU/hr) | Maximum Power Consumption (W)* | Maximum Heat Dissipation (BTU/hr)** |
|---|---|---|---|---|
| 5520-24T | 52 | 176 | 142 | 483 |
| 5520-24W | 54 | 182 | 2480 | 1092 |
| 5520-48T | 60 | 205 | 171 | 584 |
| 5520-48W | 59 | 203 | 4100 | 1817 |
| 5520-12MW-36W | 66 | 224 | 4095 | 1862 |
| 5520-48SE | 61 | 209 | 255 | 872 |
| 5520-24X | 48 | 165 | 171 | 585 |
| 5520-24T-ACDC | 41 | 140 | 135 | 459 |
| 5520-48T-ACDC | 46 | 156 | 141 | 481 |
| 5520-24X-ACDC | 39 | 132 | 169 | 575 |
| 5520-48SE-ACDC | 45 | 154 | 223 | 760 |

* Includes maximum PoE load (W) through the switch

** Does not include PoE load heat dissipated through external electronic load

## Fan and Acoustic Noise

| Switch Model | Acoustic Information | |
|---|---|---|
| 5520-24T | Typical: Single 350W AC PSU, no VIM<br>Maximum: Dual 350W AC PSU, 5520-VIM-4YE | |
| | Bystander Sound Pressure<br>39.6 dB(A),0˚C to 35˚C (32˚F to 95˚F) (Typical)<br>77.5 dB(A), 50˚C (122˚F) (Maximum) | Sound Power<br>5.1 B, 0˚C to 35˚C (32˚F to 95˚F) (Typical)<br>8.46 B, 50˚C (122˚F) (Maximum) |
| 5520-24W | Typical: Single 715W AC PSU, no VIM<br>Maximum: Dual 1100W AC PSU, 5520-VIM-4YE | |
| | Bystander Sound Pressure<br>50.4 dB(A),0˚C to 35˚C (32˚F to 95˚F) (Typical)<br>67.1 dB(A), 25˚C (77˚F) (Maximum)<br>78.9 dB(A), 50˚C (122˚F) (Maximum) | Sound Power<br>6 B, 0˚C to 35˚C (32˚F to 95˚F) (Typical)<br>7.61 B, 25˚C (77˚F) (Maximum)<br>8.6 B, 50˚C (122˚F) (Maximum) |
| 5520-48T | Typical: Single 350W AC PSU, no VIM<br>Maximum: Dual 350W AC PSU, 5520-VIM-4YE | |
| | Bystander Sound Pressure<br>39.0 dB(A),0˚C to 35˚C (32˚F to 95˚F) (Typical)<br>79.0 dB(A), 50˚C (122˚F) (Maximum) | Sound Power<br>4.9 B, 0˚C to 35˚C (32˚F to 95˚F) (Typical)<br>8.52 B, 50˚C (122˚F) (Maximum) |
| 5520-48W | Typical: Single 1100W AC PSU, no VIM<br>Maximum: Dual 2000W AC PSU (240VAC), 5520-VIM-4YE | |
| | Bystander Sound Pressure<br>64.3 dB(A),0˚C to 35˚C (32˚F to 95˚F) (Typical)<br>69.1 dB(A), 25˚C (77˚F) (Maximum)<br>79.4 dB(A), 50˚C (122˚F) (Maximum) | Sound Power<br>7.24 B, 0˚C to 35˚C (32˚F to 95˚F) (Typical)<br>7.65 B, 25˚C (77˚F) (Maximum)<br>8.6 B, 50˚C (122˚F) (Maximum) |
| 5520-12MW-36W | Typical: Single 1100W AC PSU, no VIM<br>Maximum: Dual 2000W AC PSU (240VAC), 5520-VIM-4YE | |
| | Bystander Sound Pressure<br>62.7 dB(A),0˚C to 35˚C (32˚F to 95˚F) (Typical)<br>69.2 dB(A), 25˚C (77˚F) (Maximum)<br>78.8 dB(A), 50˚C (122˚F) (Maximum) | Sound Power<br>7.25 B, 0˚C to 35˚C (32˚F to 95˚F) (Typical)<br>7.64 B, 25˚C (77˚F) (Maximum)<br>8.6 B, 50˚C (122˚F) (Maximum) |
| 5520-48SE | Typical: Single 350W AC PSU, no VIM<br>Maximum: Dual 350W AC PSU, 5520-VIM-4YE | |
| | Bystander Sound Pressure<br>41.4 dB(A),0˚C to 35˚C (32˚F to 95˚F) (Typical)<br>77.9 dB(A), 50˚C (122˚F) (Maximum) | Sound Power<br>5.14 B, 0˚C to 35˚C (32˚F to 95˚F) (Typical)<br>8.53 B, 50˚C (122˚F) (Maximum) |

| Switch Model | Acoustic Information | |
|---|---|---|
| 5520-24X | Typical: Single 350W AC PSU, no VIM<br>Maximum: Dual 350W AC PSU, 5520-VIM-4YE | |
| | Bystander Sound Pressure<br>40.6 dB(A),0 ˚C to 35 ˚C (32 ˚F to 95 ˚F) (Typical)<br>76.9 dB(A), 50 ˚C (122 ˚F) (Maximum) | Sound Power<br>5.05 B, 0 ˚C to 35 ˚C (32 ˚F to 95 ˚F) (Typical)<br>8.52 B, 50 ˚C (122 ˚F) (Maximum) |
| 5520-24T-ACDC | Typical: F2B Airflow; Single 550W AC PSU, no VIM<br>Maximum: F2B Airflow; Dual 550W AC PSU, with 5520-VIM-4YE | |
| | Bystander Sound Pressure<br>38.6 dB(A), 0 ˚C to 40 ˚C (Typical)<br>76.5 dB(A), 50 ˚C (Maximum) | Sound Power<br>4.94 B, 0 ˚C to 40 ˚C (Typical)<br>8.60 B, 50 ˚C (Maximum) |
| | Typical: F2B Airflow; Single 550W DC PSU, no VIM<br>Maximum: F2B Airflow; Dual 550W DC PSU, with 5520-VIM-4YE | |
| | Bystander Sound Pressure<br>38.2 dB(A), 0 ˚C to 40 ˚C (Typical)<br>77.0 dB(A), 50 ˚C (Maximum) | Sound Power<br>4.89 B, 0 ˚C to 40 ˚C (Typical)<br>8.56 B, 50 ˚C (Maximum) |
| | Typical: B2F Airflow; Single 550W AC PSU, no VIM<br>Maximum: B2F Airflow; Dual 550W AC PSU, with 5520-VIM-4YE | |
| | Bystander Sound Pressure<br>38.46dB(A), 0 ˚C to 40 ˚C (Typical)<br>76.6 dB(A), 50 ˚C (Maximum) | Sound Power<br>4.99 B, 0 ˚C to 40 ˚C (Typical)<br>8.61 B, 50 ˚C (Maximum) |
| | Typical: B2F Airflow; Single 550W DC PSU, no VIM<br>Maximum: B2F Airflow; Dual 550W DC PSU, with 5520-VIM-4YE | |
| | Bystander Sound Pressure<br>39.8 dB(A), 0 ˚C to 40 ˚C (Typical)<br>79.0 dB(A), 50 ˚C (Maximum) | Sound Power<br>5.03 B, 0 ˚C to 40 ˚C (Typical)<br>8.69 B, 50 ˚C (Maximum) |
| 5520-48T-ACDC | Typical:F2B Airflow; Single 550W AC PSU, no VIM<br>Maximum: F2B Airflow; Dual 550W AC PSU, with 5520-VIM-4YE | |
| | Bystander Sound Pressure<br>38.2 dB(A), 0 ˚C to 40 ˚C (Typical)<br>76.4 dB(A), 50 ˚C (Maximum) | Sound Power<br>4.91 B, 0 ˚C to 40 ˚C (Typical)<br>8.58 B, 50 ˚C (Maximum) |
| | Typical: F2B Airflow; Single 550W DC PSU, no VIM<br>Maximum: F2B Airflow; Dual 550W DC PSU, with 5520-VIM-4YE | |
| | Bystander Sound Pressure<br>38.1 dB(A), 0 ˚C to 40 ˚C (Typical)<br>77.1 dB(A), 50 ˚C (Maximum) | Sound Power<br>4.88 B, 0 ˚C to 40 ˚C (Typical)<br>8.55 B, 50 ˚C (Maximum) |
| | Typical: B2F Airflow; Single 550W AC PSU, no VIM<br>Maximum: B2F Airflow; Dual 550W AC PSU, with 5520-VIM-4YE | |
| | Bystander Sound Pressure<br>38.5 dB(A), 0 ˚C to 40 ˚C (Typical)<br>76.7 dB(A), 50 ˚C (Maximum) | Sound Power<br>4.94 B, 0 ˚C to 40 ˚C (Typical)<br>8.54 B, 50 ˚C (Maximum) |

| Switch Model | Acoustic Information | |
|---|---|---|
| | Typical: B2F Airflow; Single 550W DC PSU, no VIM<br>Maximum: B2F Airflow; Dual 550W DC PSU, with 5520-VIM-4YE | |
| | Bystander Sound Pressure<br>39.6 dB(A), 0˚C to 40˚C (Typical)<br>79.0 dB(A), 50˚C (Maximum) | Sound Power<br>5.00 B, 0˚C to 40˚C (Typical)<br>8.70 B, 50˚C (Maximum) |
| 5520-48SE-ACDC | Typical: F2B Airflow; Single 550W AC PSU, no VIM<br>Maximum: F2B Airflow; Dual 550W AC PSU, with 5520-VIM-4YE | |
| | Bystander Sound Pressure<br>39.0 dB(A), 0˚C to 40˚C (Typical)<br>76.6 dB(A), 50˚C (Maximum) | Sound Power<br>4.98 B, 0˚C to 40˚C (Typical)<br>8.65 B, 50˚C (Maximum) |
| | Typical: F2B Airflow; Single 550W DC PSU, no VIM<br>Maximum: F2B Airflow; Dual 550W DC PSU, with 5520-VIM-4YE | |
| | Bystander Sound Pressure<br>38.7 dB(A), 0˚C to 40˚C (Typical)<br>77.2 dB(A), 50˚C (Maximum) | Sound Power<br>4.96 B, 0˚C to 40˚C (Typical)<br>8.64 B, 50˚C (Maximum) |
| | Typical: B2F Airflow; Single 550W AC PSU, no VIM<br>Maximum: B2F Airflow; Dual 550W AC PSU, with 5520-VIM-4YE | |
| | Bystander Sound Pressure<br>38.9 dB(A), 0˚C to 40˚C (Typical)<br>77.4 dB(A), 50˚C (Maximum) | Sound Power<br>4.95 B, 0˚C to 40˚C (Typical)<br>8.65 B, 50˚C (Maximum) |
| | Typical: B2F Airflow; Single 550W DC PSU, no VIM<br>Maximum: B2F Airflow; Dual 550W DC PSU, with 5520-VIM-4YE | |
| | Bystander Sound Pressure<br>40.2 dB(A), 0˚C to 40˚C (Typical)<br>79.5 dB(A), 50˚C (Maximum) | Sound Power<br>5.04 B, 0˚C to 40˚C (Typical)<br>8.75 B, 50˚C (Maximum) |
| 5520-24X-ACDC | Typical: F2B Airflow; Single 550W AC PSU, no VIM<br>Maximum: F2B Airflow; Dual 550W AC PSU, with 5520-VIM-4YE | |
| | Bystander Sound Pressure<br>38.1 dB(A), 0˚C to 40˚C (Typical)<br>75.8 dB(A), 50˚C (Maximum) | Sound Power<br>4.90 B, 0˚C to 40˚C (Typical)<br>8.59 B, 50˚C (Maximum) |
| | Typical: F2B Airflow; Single 550W DC PSU, no VIM<br>Maximum: F2B Airflow; Dual 550W DC PSU, with 5520-VIM-4YE | |
| | Bystander Sound Pressure<br>38.0 dB(A), 0˚C to 40˚C (Typical)<br>76.6 dB(A), 50˚C (Maximum) | Sound Power<br>4.88 B, 0˚C to 40˚C (Typical)<br>8.53 B, 50˚C (Maximum) |
| | Typical: B2F Airflow; Single 550W AC PSU, no VIM<br>Maximum: B2F Airflow; Dual 550W AC PSU, with 5520-VIM-4YE | |
| | Bystander Sound Pressure<br>38.3 dB(A), 0˚C to 40˚C (Typical)<br>77.3 dB(A), 50˚C (Maximum) | Sound Power<br>4.94 B, 0˚C to 40˚C (Typical)<br>8.64 B, 50˚C (Maximum) |

| Switch Model | Acoustic Information | |
|---|---|---|
| | Typical: B2F Airflow; Single 550W DC PSU, no VIM<br>Maximum: B2F Airflow; Dual 550W DC PSU, with 5520-VIM-4YE | |
| | Bystander Sound Pressure<br>40.1 dB(A), 0˚C to 40˚C (Typical)<br>79.3 dB(A), 50˚C (Maximum) | Sound Power<br>4.94 B, 0˚C to 40˚C (Typical)<br>8.73 B, 50˚C (Maximum) |

# Environmental

## Environmental Specifications

EN/ETSI 300 019-2-1 v2.1.2 - Class 1.2 Storage

EN/ETSI 300 019-2-2 v2.1.2 - Class 2.3 Transportation

EN/ETSI 300 019-2-3 v2.1.2 - Class 3.1e Operational

EN/ETSI 300 753 (1997-10) - Acoustic Noise

ASTM D3580 Random Vibration Unpackaged 1.5 G

## Environmental Compliance

EU RoHS - 2011/65/EU

EU WEEE - 2012/19/EU

EU REACH - Regulation (EC) No 1907/2006 - Reporting

China RoHS - SJ/T 11363-2006

Taiwan RoHS - CNS 15663 (2013.7)

List of Energy Star Certified Models:*

5520-24T / 5520-24T-BASE

5520-24X / 5520-24X-BASE

5520-24W

5520-48T / 5520-48T-BASE

5520-48SE / 5520-48SE-BASE

5520-48W

5520-12MW-36W

5520-24T-ACDC / 5520-24T-ACDC-BASE

5520-24X-ACDC / 5520-24X-ACDC-BASE

5520-48T-ACDC / 5520-48T-ACDC-BASE

5520-48SE-ACDC / 5520-48SE-ACDC-BASE

*Energy Star Models must be ordered with Air Temp sensor ESTS01

## Environmental Operating Conditions

Temp: 0°C to 50°C (32°F to 122°F) for Front-Back cooling

Temp: 0°C to 45°C (32°F to 113°F) for Back-Front cooling (5520-24T, 5520-24x, 5520-48T, 5520-48SE)

Humidity: 5% to 95% relative humidity, non-condensing

Altitude: 0 to 3,000 meters (9,850 feet)

Shock (half sine): 98m/s2 (10G), 11ms, 18 shocks

Random vibration: 3Hz to 500Hz at 1.5 G rms

## Packaging and Storage Specifications

Temp: -40°C to 70°C (-40°F to 158°F)

Humidity: 5% to 95% relative humidity, non-condensing

Packaged Shock (half sine): 180 m/s2 (18 G), 6 ms, 600 shocks

Packaged Vibration: 5Hz to 62Hz at velocity 5 mm/s, 62Hz to 500Hz at 0.2 G

Packaged Random Vibration: 5Hz to 20Hz at 1.0 ASD w/–3 dB/oct. from 20Hz to 200Hz

Packaged Drop Height: 14 drops minimum on sides and corners at 42 inches (<15 kg box)

# Regulatory and Safety

## North American ITE

UL 60950-1

UL/CuL 62368-1 Listed

Complies with FCC 21CFR 1040.10 (U.S. Laser Safety)

CDRH Letter of Approval (US FDA Approval)

CAN/CSA 22.2 No. 60950-1

## European ITE

EN 60950-1, EN 62368-1

EN 60825-1 Class 1 (Lasers Safety)

2014/35/EU Low Voltage Directive

## International ITE

CB Report and Certificate per IEC 60950-1

IEC 62368-1

# EMI/EMC Standards

## North American EMC for ITE

FCC CFR 47 Part 15 Class A (USA)

CB Report and Certificate IEC 62368-1

RoHS Directive 2011/65/EU

AS/NZS 60950-1 (Australia /New Zealand)

### European EMC Standards

EN 55035
EN 55032 Class A
EN 55024
EN 55011
EN 61000-3-2,2014 (Harmonics)
EN 61000-3-3 2013 (Flicker)
EN 300 386 (EMC Telecommunications)
2014/30/EU EMC Directive

### International EMC Certifications

CISPR 32, Class A (International Emissions)
AS/NZS CISPR32
CISPR 24 Class A (International Immunity)
IEC 61000-4-2/EN 61000-4-2 Electrostatic Discharge, 8kV Contact, 15 kV Air, Criteria B
IEC 61000-4-3 /EN 61000-4-3 Radiated Immunity 10V/m, Criteria A
IEC 61000-4-4/EN 61000-4-4 Transient Burst, 1 kV, Criteria AB
IEC 61000-4-5 /EN 61000-4-5 Surge, 2 kV L-L, 2 kV L-G, Level 3, Criteria B
IEC 61000-4-6 Conducted Immunity, 0.15-80 MHz, 10V/m unmod. RMS, Criteria A
IEC/EN 61000-4-11 Power Dips & Interruptions, >30%, 25 periods, Criteria C

### Country Specific

VCCI Class A (Japan Emissions)
ACMA RCM (Australia Emissions)
CCC Mark (China)
KCC Mark, EMC Approval (Korea)
EAC Mark (Custom Union)
NRCS Mark (South Africa)
BSMI Mark (Taiwan)
Anatel (Brazil)
NoM (Mexico)

## IEEE 802.3 Media Access Standards

IEEE 802.3ab 1000BASE-T
IEEE 802.3bz 2.5G/5GBASE-T
IEEE 802.3bt Type4 PoE
IEEE 802.3ae 10GBASE-X
IEEE 802.3aq 10GBASE-LRM
IEEE 802.3by 25GBASE-X
IEEE 802.3ba/802.3bm 40GBASE-X and 100GBASE-X
IEEE 802.3az Energy Efficient Ethernet

## Ordering Notes

Customers ordering a 5520 switch receive the base switch along with Base software license, fan modules and rack- mount kit. At least one Power Supply Unit (PSU) is required for 5520 operation, and a second PSU is required for redundancy and/or additional power.

Versatile Interface Modules (VIMs), power supplies, transceiver/optics, power cords, as well as Premier and MACsec licenses must be ordered separately.

## Base Software and Optional Premier License

The Base software included with each 5520 unit supports most available switch features. Certain features, however, require a Premier license to operate.

For Switch Engine, a Premier License is required for:

- 5 or more OSPF interfaces
- PIM DM / PM SSM
- Anycast RP (Rendezvous Point)
- Multi-Source Discovery Protocol (MSDP)
- IS-IS/BGP4/MBGP*
- GRE Tunneling
- EthernetVPN (EVPN)
- Multi-Protocol Label Switching (MPLS)***

For Fabric Engine, a Premier License is required for:

- 5 or more OSPF or RIP interfaces
- 3 or more BGP peers
- 25 or more VRFs**
- Layer 3 Virtual Service Networks (L3 VSNs)
- Distributed Virtual Routing (DvR) Controller

* Up to 2 BGP interfaces included in Base software with the EXOS 31.4 Release

** VRFs included in Base software with the VOSS 8.4 Release

*** MPLS available with Switch Engine 31.6 release

# Ordering Information

## 5520 Systems - Fans Included

| Part Number | Product Name | Product Description |
|---|---|---|
| 5520-24T | 5520 24-port Switch | 5520 Universal Switch with 24 x 10/100/1000BASE-T Full / Half-Duplex MACsec-capable ports, includes 2 x Stacking/QSFP28 ports, 2 fan modules, 1 VIM slot, 2 unpopulated modular PSU slots, Base software license. |
| 5520-24W | 5520 24-port 90w PoE Switch | 5520 Universal Switch with 24 x 10/100/1000BASE-T Full / Half-Duplex 802.3bt 90W PoE MACsec-capable ports, includes 2 x Stacking/QSFP28 ports, 3 fan modules, 1 VIM slot, 2 unpopulated modular PSU slots, Base software license. |
| 5520-48SE | 5520 48-port SFP Switch | 5520 Universal Switch with 48 x 100M/1Gb SFP MACsec capable ports, includes 2 x Stacking/QSFP28 ports, 3 fan modules, 1 VIM slot, 2 unpopulated modular PSU slots, Base software license |
| 5520-48T | 5520 48-port Switch | 5520 Universal Switch with 48 x 10/100/1000BASE-T Full / Half-Duplex MACsec-capable ports, includes 2 x Stacking/QSFP28 ports, 3 fan modules, 1 VIM slot, 2 unpopulated modular PSU slots, Base software license. |
| 5520-48W | 5520 48-port 90w PoE Switch | 5520 Universal Switch with 48 x 10/100/1000BASE-T Full / Half-Duplex 802.3bt 90W PoE MACsec-capable ports, includes 2 x Stacking/QSFP28 ports, 3 fan modules, 1 VIM slot, 2 unpopulated modular PSU slots, Base software license. |
| 5520-12MW-36W | 5520 48-port 90w PoE with 12 ports multi-rate Switch | 5520 Universal Switch with 12 x 100Mb/1Gb/2.5Gb/5Gb 802.3bt 90W PoE MACsec-capable ports plus 36 x 10/100/1000BASE-T 802.3bt 90W PoE Full / Half-Duplex MACsec-capable ports, includes 2 x Stacking/QSFP28 ports, 3 fan modules, 1 VIM slot, 2 unpopulated modular PSU slots, Base software license. |
| 5520-24X | 5520 24-port SFP+ Switch | 5520 Universal Switch with 24 x 100Mb/1Gb/10Gb SFP+ ports, includes 2 Stacking/QSFP28 ports, 2 fan modules, 1 VIM slot, 2 unpopulated modular PSU slots, Base software license. |

## 5520 Systems – Without Fans and PSUs (ordered separately)

| Part Number | Product Name | Product Description |
|---|---|---|
| 5520-24T-BASE | 5520 24-port Switch | 5520 Universal Switch with 24 x 10/100/1000BASE-T Full / Half-Duplex MACsec-capable ports, includes 2 x Stacking/QSFP28 ports, 2 unpopulated fan slots, 1 VIM slot, 2 unpopulated modular PSU slots, Base software license. |
| 5520-48T-BASE | 5520 48-port Switch | 5520 Universal Switch with 48 x 10/100/1000BASE-T Full / Half-Duplex MACsec-capable ports, includes 2 x Stacking/QSFP28 ports, 3 unpopulated fan slots, 1 VIM slot, 2 unpopulated modular PSU slots, Base software license. |
| 5520-48SE-BASE | 5520 48-port SFP Switch | 5520 Universal Switch with 48 x 100M/1Gb SFP MACsec-capable ports, includes 2 x Stacking/ QSFP28 ports, 3 unpopulated fan slots, 1 VIM slot, 2 unpopulated modular PSU slots, Base software license. |
| 5520-24X-BASE | 5520 24-port SFP+ Switch | 5520 Universal Switch with 24 x 100Mb/1Gb/10Gb SFP+ ports, includes 2 Stacking/QSFP28 ports, 2 unpopulated fan slots, 1 VIM slot, 2 unpopulated modular PSU slots, Base software license. |

## 5520 Systems - AC/DC Switches without Fans and PSUs (ordered separately)

| Part Number | Product Name | Product Description |
|---|---|---|
| 5520-24T-ACDC-BASE | 5520 24-port Switch | 5520 Universal Switch with 24 x 10/100/1000BASE-T FDX/HDX MACsec-capable ports, 2 x Stacking/QSFP28 ports, 1 unpopulated VIM slot, 3 unpopulated modular fan slots, 2 unpopulated modular PSU slots, AC or DC PSU capable. |
| 5520-48T-ACDC-BASE | 5520 48-port Switch | 5520 Universal Switch with 48 x 10/100/1000BASE-T FDX/HDX MACsec-capable ports, 2 x Stacking/QSFP28 ports, 1 unpopulated VIM slot, 3 unpopulated modular fan slots, 2 unpopulated modular PSU slots, AC or DC PSU capable. |
| 5520-24X-ACDC-BASE | 5520 24-port SFP+ Switch | 5520 Universal Switch with 24 x 1Gb/10Gb SFP+ ports, 2 Stacking/QSFP28 ports, 1 unpopulated VIM slot, 3 unpopulated modular fan slots, 2 unpopulated modular PSU slots, AC or DC PSU capable. |
| 5520-48SE-ACDC-BASE | 5520 48-port SFP Switch | 5520 Universal Switch with 48 x 1000BASE-X SFP MACsec capable ports, 2 x Stacking/ QSFP28 ports, 1 unpopulated VIM slot, 3 unpopulated modular fan slots, 2 unpopulated modular PSU slots, AC or DC PSU capable. |

## Versatile Interface Modules

| Part Number | Product Name | Product Description |
|---|---|---|
| 5520-VIM-4X | 4-port SFP+ module | 5520 Versatile Interface Module with 4 x 1/10Gb SFP+ ports |
| 5520-VIM-4XE | 4-port SFP+ module LRM/ MACsec capable | 5520 Versatile Interface Module with 4 x 1/10Gb SFP+ LRM and MACsec-capable ports |
| 5520-VIM-4YE | 4-port SFP28 module MACsec capable | 5520 Versatile Interface Module with 4 x 10/25Gb SFP28 MACsec-capable ports |

## Power Supplies for use with 5520 AC only Switches

| Part Number | Product Name | Product Description |
|---|---|---|
| XN-ACPWR-350W-FB* | 350W AC PSU FB | 350W AC Power Supply Module - Front to Back airflow, also used on X465 and VSP 4900 |
| XN-ACPWR-715W-FB* | 715W AC PSU FB | 715W AC PoE Power Supply Module - Front to Back airflow, also used on 5720, X465, and VSP 4900 |
| XN-ACPWR-1100W-FB* | 1100W AC PSU FB | 1100W AC PoE Power Supply Module - Front to Back airflow, also used on 5720, X465, and VSP 4900 |
| XN-ACPWR-2000W-FB* | 2000WAC PSU FB | 2000W AC PoE Power Supply Module - Front to Back airflow, also used on 5720, X465, and VSP 4900 |
| XN-ACPWR-350W-BF | 350W AC PSU BF | 350W Back to Front cooling AC PSU supported on 5520 Non-PoE switches |

* XN-ACPWR-xxx-FB power supply units cannot be used with legacy 10941, 10951, 10953, or XN-ACPWR-2000W-F PSUs on the same switch.

## Power Supplies for use with 5520-ACDC Switches

| Part Number | Product Name | Product Description |
|---|---|---|
| XN-ACPWR-550W-FB | 550W AC PSU FB | 550W AC Power Supply Module - Front to Back airflow |
| XN-ACPWR-550W-BF | 550W AC PSU BF | 550W AC Power Supply Module - Back to Front airflow |

| Part Number | Product Name | Product Description |
|---|---|---|
| XN-DCPWR-550W-FB | 550W DC PSU FB | 550W DC Power Supply Module - Front to Back airflow |
| XN-DCPWR-550W-BF | 550W DC PSU BF | 550W DC Power Supply Module - Back to Front airflow |

## Fan Modules, Thermal Sensor, and Rack Mount Kits

| Part Number | Product Name | Product Description |
|---|---|---|
| 17115 | Spare Fan Module FB | Fan module for 5520, Front to Back airflow |
| 17116 | Spare Fan Module BF | Fan module for 5520, Back to Front airflow |
| ESTS01 | Air Temperature Thermal Sensor | Ambient Air Temperature Sensor for Energy Star (USB) |
| XN-4P-RMKIT-005 | 4-Post Rack Mount Kit | Spare 4-Post Rack Mount Kit for 5520 |
| XN-2P-RMKIT-005** | 2-Post Rack Mount Kit | Optional 2-Post Rack Mount Kit for 5520 |

** The optional 2-post rack mount kit can be used with 5520 chassis HW rev AD or higher.

## Software Licenses

| Part Number | Product Name | Product Description |
|---|---|---|
| 5000-PRMR-LIC-P | Premier License for 5000 Series | Perpetual Premier License for 5000 Series switches |
| 5000-MACSEC-LIC-P | MACsec License for the 5000 Series | Perpetual MACsec license for the 5000 Series switches |

## Warranty

All 5520 Series models are covered under Extreme's Universal LLW policy. For warranty details, visit the Policies and Warranties page.

## Power Cords

Power cords are not included with the 5520 in support of our green initiatives but can be ordered separately.

## Optics / Transceivers

For a list of the optics and transceivers supported on the 5520 Series hardware, refer to our Extreme Optics Compatibility Tool.

## Maintenance Services

Extreme's maintenance and support services are provided by 100% in-house engineering experts. We have a rate of over 90% first-person resolution, ensuring efficient operation of your business- essential network.

With 24x7x365 phone support, advanced parts replacement, and on-site support, we augment your staff with expert resources to help you mitigate critical network issues fast. Visit ExtremeWorks Maintenance Services for more information.

## Certifications

For information on Industry, Security, and Government certifications for 5520 Series models, contact your Sales Representative.